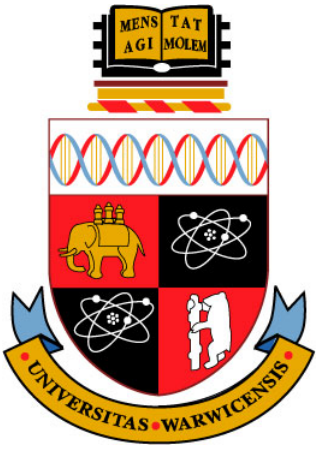

How Strong Is Your Tinder Game? Strategic Two-Sided Search in Swipe-Based Dating App Markets

Patricio Hernandez Senosiain

Abstract

Your abstract here.

Supervisor: Dr. Jonathan Cave

Department of Economics

2019-2022

Contents

1 Introduction

Points to discuss on introduction

- What is Tinder?
  - When was it started?
  - What is swiping?
  - How popular it is?
- Why does Tinder pose an interesting economic problem?
  - Stage interaction
  - Platform features: budgets, observability, directed search, asynchronicity
  - Repeated games: curse of dimensionality, beliefs and meta-beliefs
- What does this paper study?
  - Model of two-sided search with strategic considerations
  - Equilibrium refinement, computation, and analysis
  - Planner considerations on directed search and budget setting
- What does this paper contribute?
  - First model to address budgeted search in Tinder?
  - First model to combine idiosyncracy and pizzaz
  - Case study for the use of computational techniques in

1.1 Related Work

- Searching and Matching
  - Gale-Shapley, Roth&Sotomayor
  - Two-sided: Burdett and Wright (1998), Chade (2006), Smith, Adachi
- Mean-Field Game Theory: Iyer et al. (2014), Gummadi et al. (2013), Jovanovic and Rosenthal (1988)
- Modern Dating Apps: Olmeda (2021), Kanoria and Saban (2021)

2 Model

2.1 Setup

The researcher and the supervisor both attended a photography for the new hill valley clock tower. This can be seen in figure.
Again from figure we can see the researcher on the *left* and the supervisor on the *right*.

From this, a table was made for some of the items needed for temporal experiment number one to undergo completion. This is set to occur on `October 26, 1985, 1:18 A.M.`.

2.2 The Dating Market

Item	Description
2 x Pocket Clocks	For measurement in time difference of machine and present time
Einstein	The Dog test pilot
JVC GR-C1	VHS Camcorder

Table 1: Inventory list for temporal experiment number one

2.3 The Search Problem

3 Equilibrium

3.1 Steady-State Equilibrium

3.2 Numerical Computation

3.3 Comparative Statics

4 Simulations

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

4.1 Sub Chapter

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.

5 Conclusion

In this chapter we shall do a reference to an entry in the bibliography, `bibliography.bib`.

What we know of the invention of the flux capacitor is that Dr. Emmett Brown thought of this when hanging a clock in the bathroom. He was standing on his porcelain

sink and slipped because it was wet, the resulting hit on the head was apparently a cause to this invention Brown (1955).

5.1 Future Work

The corresponding sketch made on this day has been attached in appendix A.

References

Brown, E. (1955). The creation of the flux capacitor. .

Burdett, K. and Wright, R. (1998). Two-sided search with nontransferable utility. *Review of Economic Dynamics*, 1(1):220–245.

Chade, H. (2006). Matching with noise and the acceptance curse. *Journal of Economic Theory*, 129(1):81–113.

Gummadi, R., Key, P., and Proutiere, A. (2013). Optimal bidding strategies and equilibria in dynamic auctions with budget constraints. *Available at SSRN 2066175*.

Iyer, K., Johari, R., and Sundararajan, M. (2014). Mean field equilibria of dynamic auctions with learning. *Management Science*, 60(12):2949–2970.

Jovanovic, B. and Rosenthal, R. W. (1988). Anonymous sequential games. *Journal of Mathematical Economics*, 17(1):77–87.

Kanoria, Y. and Saban, D. (2021). Facilitating the search for partners on matching platforms. *Management Science*.

Olmeda, F. (2021). Towards a statistical physics of dating apps. *arXiv preprint arXiv:2107.14076*.

A Solving For The Market Steady State

B Uniqueness and Existence of Search Problem